

Listing of the Claims

This listing of the claims replaces all prior versions of the claims in the application.

1. - 7. (Canceled.)

8. (Previously amended.) An isolated antibody selected from the group consisting of:

a) an antibody which specifically binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, wherein the antibody binds to an epitope of a polypeptide of SEQ ID NO:1 or SEQ ID NO:3, and

b) an antibody which specifically binds to a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, wherein the antibody binds to an epitope of a polypeptide having a naturally occurring amino acid sequence at least 90% identical to SEQ ID NO:1 or SEQ ID NO:3, said naturally occurring amino acid sequence having HS3C activity.

9. - 43. (Canceled.)

44. (Withdrawn.) A diagnostic test for a condition or disease associated with the expression of HS3C in a biological sample comprising the steps of:

a) combining the biological sample with an antibody of claim 8, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex; and

b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

45. (Previously presented.) The antibody of claim 8, wherein the antibody is:

a) a chimeric antibody,

b) a single chain antibody,

c) a Fab fragment,

- d) a F(ab')₂ fragment, or
- e) a humanized antibody.

46. (Previously presented.) A composition comprising an antibody of claim 8 and an acceptable excipient.

47. (Withdrawn.) A method of diagnosing a condition or disease associated with the expression of HS3C in a subject, comprising administering to said subject an effective amount of the composition of claim 46.

48. (Currently amended.) ~~A~~ The composition of claim 46, wherein the antibody is labeled.

49. (Withdrawn.) A method of diagnosing a condition or disease associated with the expression of HS3C in a subject, comprising administering to said subject an effective amount of the composition of claim 48.

50. (Previously presented.) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 8, the method comprising:

- a) immunizing an animal with a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibodies from said animal, and
- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

51. (Previously presented.) An antibody produced by a method of claim 50.

52. (Previously presented.) A composition comprising the antibody of claim 51 and a suitable carrier.

53. (Previously presented.) A method of making a monoclonal antibody with the specificity of the antibody of claim 8, the method comprising:

- a) immunizing an animal with a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibody producing cells from the animal,
- c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells,
- d) culturing the hybridoma cells, and
- e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

54. (Previously presented.) A monoclonal antibody produced by a method of claim 53.

55. (Previously presented.) A composition comprising the antibody of claim 54 and a suitable carrier.

56. (Previously presented.) The antibody of claim 8, wherein the antibody is produced by screening a Fab expression library.

57. (Previously presented.) The antibody of claim 8, wherein the antibody is produced by screening a recombinant immunoglobulin library.

58. (Withdrawn.) A method of detecting a polypeptide having an amino acid sequence

selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3 in a sample, the method comprising:

- a) incubating the antibody of claim 8 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3 in the sample.

59. (Withdrawn.) A method of purifying a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3 from a sample, the method comprising:

- a) incubating the antibody of claim 8 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) separating the antibody from the sample and obtaining the purified polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.